



SHILAP Revista de Lepidopterología

ISSN: 0300-5267

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Sociedad Hispano-Luso-Americana de  
Lepidopterología  
España

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SHILAP Revista de Lepidopterología, vol. 42, núm. 168, diciembre, 2014, pp. 633-647

Sociedad Hispano-Luso-Americana de Lepidopterología

Madrid, España

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## New records of mining moths from the Iberian Peninsula from 2014 (Insecta: Lepidoptera)

A. Laštůvka & Z. Laštůvka

### Abstract

New records of Nepticulidae, Opostegidae, Heliozelidae, Bucculatricidae and Gracillariidae for Portugal and Spain are presented. *Stigmella sakhalinella* Puplesis, 1984, *Ectoedemia lousella* (Sircom, 1849), *Bucculatrix albedinella* (Zeller, 1839), *B. demaryella* (Duponchel, 1840), *B. ulmella* Zeller, 1848, *B. albella* Stainton, 1867, *Caloptilia semifascia* (Haworth, 1828), *Parornix devoniella* (Stainton, 1850), *P. torquillella* (Zeller, 1850), *Phyllonorycter distentella* (Zeller, 1846), *P. cavella* (Zeller, 1846), *P. deschkai* Triberti, 2007, *P. acerifoliella* (Zeller, 1839) and *P. dubitella* (Herrich-Schäffer, 1855) are new for Spain, and *Stigmella sakhalinella*, *Bucculatrix albedinella*, *Caloptilia betulicola* (Hering, 1928), *Parornix tenella* (Rebel, 1919) and *Phyllonorycter ochreojunctella* (Klimesch, 1942) are new for Portugal. *Stigmella sakhalinella*, *Ectoedemia lousella*, *Bucculatrix albedinella*, *B. albella*, *Caloptilia semifascia*, *Phyllonorycter cavella*, *P. deschkai*, *P. acerifoliella* and *P. dubitella* are new for the Iberian Peninsula. New province records are given of 67 species (about 130 new province records in all).

KEY WORDS: Lepidoptera, Nepticulidae, Opostegidae, Heliozelidae, Bucculatricidae, Gracillariidae, new records, Iberian Peninsula.

### Nuevos registros de Lepidoptera minadores en la Península Ibérica del 2014 (Insecta: Lepidoptera)

### Resumen

Se mencionan nuevos registros de Nepticulidae, Opostegidae, Heliozelidae, Bucculatricidae y Gracillariidae para Portugal y España. *Stigmella sakhalinella* Puplesis, 1984, *Ectoedemia lousella* (Sircom, 1849), *Bucculatrix albedinella* (Zeller, 1839), *B. demaryella* (Duponchel, 1840), *B. ulmella* Zeller, 1848, *B. albella* Stainton, 1867, *Caloptilia semifascia* (Haworth, 1828), *Parornix devoniella* (Stainton, 1850), *P. torquillella* (Zeller, 1850), *Phyllonorycter distentella* (Zeller, 1846), *P. cavella* (Zeller, 1846), *P. deschkai* Triberti, 2007, *P. acerifoliella* (Zeller, 1839) y *P. dubitella* (Herrich-Schäffer, 1855) son nuevas para España, y *Stigmella sakhalinella*, *Bucculatrix albedinella*, *Caloptilia betulicola* (Hering, 1928), *Parornix tenella* (Rebel, 1919) y *Phyllonorycter ochreojunctella* (Klimesch, 1942) son nuevas para Portugal. *Stigmella sakhalinella*, *Ectoedemia lousella*, *Bucculatrix albedinella*, *B. albella*, *Caloptilia semifascia*, *Phyllonorycter cavella*, *P. deschkai*, *P. acerifoliella* y *P. dubitella* son nuevas en la Península Ibérica. Se dan nuevas citas provinciales para 67 especies (en total cerca de 130 nuevas citas provinciales).

PALABRAS CLAVE: Lepidoptera, Nepticulidae, Opostegidae, Heliozelidae, Bucculatricidae, Gracillariidae, nuevos registros, Península Ibérica.

### Introduction

Ongoing research on mining moths realized by the authors in the Iberian Peninsula in 2014 brought some new faunistic records and other observations. This contribution adds to the publications by VAN NIEUKERKEN *et al.* (2004), LAŠTŮVKA & LAŠTŮVKA (2009, 2011, 2012, 2014), LAŠTŮVKA *et*

*al.* (2013), CORLEY *et al.* (2008, 2009, 2011, 2013), etc. which contain references to previously published data. The findings of 9 species new for the Iberian Peninsula, 14 species new for Spain, 5 for Portugal and 69 species new for individual provinces are given here.

## Material and methods

The presented records are mostly the results of the authors' (AL & ZL) three week long visit to the Iberian Peninsula from 7th to 30th June 2014. Attention was especially paid to northern provinces of Spain from Gerona to Orense and to Trás-os-Montes and Minho in Portugal. All material is deposited in the collection of the first author. Therefore collectors and the collection are not repeated for the individual species. The material was mainly collected at light (UV lamp 125 W, fluorescent tubes 8 and 20 W), but also vacated mines or mines with larvae were found, and adults of many species were reared.

## New Iberian or country records

### NEPTICULIDAE

*Stigmella sakhalinella* Puplesis, 1984

ES: Orense, Sandiás, 4 ♂♂, 13-VI-2014. PT: Trás-os-Montes, PN Montesinho, Montesinho, 1 ♂, 15-VI-2014, both at light in the stand of *Betula pubescens* (*B. celtiberica*).

Eurosiberian species, larva mines *Betula* spp. growing mostly in moist or peatland forests (e.g. LAŠTŮVKA & LAŠTŮVKA, 1997). **New species for Spain, Portugal and the Iberian Peninsula** (Figs 1-3).

*Ectoedemia lousiella* (Sircom, 1849)

ES: Barcelona, San Sadurní de Noya, 8-VI-2014; Burgos, Tablada del Rudrón, 22-VI-2014, always mines in fruits of *Acer campestre*.

Species with European distribution, known especially from central, partly from western, southern and eastern Europe (e.g. LAŠTŮVKA & LAŠTŮVKA, 1997). **New species for Spain and the Iberian Peninsula** (Fig. 4).

### BUCCULATRICIDAE

*Bucculatrix albedinella* (Zeller, 1839)

ES: Gerona, Madremanya, mines on *Ulmus* sp., 30-VI-2014. PT: Trás-os-Montes, Abreiro, 2 ♀♀, 17-VI-2014.

Species known from nearly all European countries up to southern Scandinavia (MEY, 2013), its larva develops on *Ulmus* spp. **New species for Spain, Portugal and the Iberian Peninsula** (Figs 5, 6).

*Bucculatrix demaryella* (Duponchel, 1840)

ES: Orense, Sandiás, mines on *Betula pubescens*, 13-VI-2014. PT: Trás-os-Montes, PN Montesinho, Montesinho, 16-VI-2014, São Julião de Montenegro, mines on *Betula pubescens*, 18-VI-2014.

European (Eurosiberian?) species, widely distributed especially in northern parts of Europe (MEY, 2013), larva mines on *Betula* spp., also *Corylus* and *Castanea* are known as host plants (e.g. HEATH & EMMET, 1985). In the Iberian Peninsula recorded in Beira Alta in Portugal (CORLEY *et al.*, 2009). **New species for Spain** (Fig. 7, 8).

*Bucculatrix ulmella* Zeller, 1848

ES: Burgos, Hoyos del Tozo, 1 ♂, 1 ♀, 21-VI-2014, Santa Marina, 1 ♂, 11-VI-2014; Gerona, Espinelves, 2 ♂♂, 7-VI-2014; Huesca, Javierrelatre, 1 ♀, 10-VI-2014.

Widespread Western Palaearctic species (MEY, 2013), with trophic relation to deciduous *Quercus* species. It is probably widely distributed also in the Iberian Peninsula, especially in its northern parts. In Portugal recorded in Trás-os-Montes by CORLEY *et al.* (2006). **New species for Spain** (Fig. 9).

*Bucculatrix albella* Stainton, 1867

ES: Gerona, La Junquera, empty mines on *Paliurus spina-christi*, 30-VI-2014.

Monophagous species on *Paliurus spina-christi*, known from southern France, across Italy and the Balkan Peninsula extending to Palestina, also in northern Africa (MEY, 2013). **New species for Spain and the Iberian Peninsula** (Fig. 10).

## GRACILLARIIDAE

*Caloptilia betulicola* (Hering, 1928)

ES: Lugo, Ferreira de Pantón, mines on *Betula pubescens*, 19-VI-2014; Zamora, Portillo del Padornelo, mines with larvae on *Betula pubescens*, 12-VI-2014, 2 ♂♂ ex larva, VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 1 ♀, 18-VI-2014; Trás-os-Montes, PN Montesinho, Montesinho, mines with larvae on *Betula pubescens*, 15-VI-2014; Tourém, mines with larvae on *Betula pubescens*, 18-VI-2014.

Species with Eurosiberian distribution, larva on *Betula* spp. (DE PRINS & DE PRINS, 2005, 2014). In the Iberian Peninsula known from the province of Orense (LAŠTŮVKA & LAŠTŮVKA, 2014). **New species for Portugal**.

*Caloptilia semifascia* (Haworth, 1828)

ES: Burgos, San Andrés de Montearados, mines on *Acer campestre*, 21-VI-2014, 2 ♂♂, 2 ♀♀ ex larva, VII-2014; León, Toreno, mines on *Acer pseudoplatanus*, 19-VI-2014, 1 ♂ ex larva, VII-2014.

Western Palaearctic species, larva preferably on *Acer campestre*, occasionally on *A. platanoides* or *A. pseudoplatanus* (DE PRINS & DE PRINS, 2005, 2014, and own observations). **New species for Spain and the Iberian Peninsula** (Figs. 11-13).

*Parornix devoniella* (Stainton, 1850)

ES: Gerona, Espinelves, 1 ♂, 27-VI-2012; León, Páramo de Sil, 1 ♂, 1 ♀, 19-VI-2014.

Widespread in Palaearctic region, with trophic relation to *Corylus avellana* (DE PRINS & DE PRINS, 2005, 2014). Known from some provinces in Portugal: Estremadura (CORLEY *et al.*, 2006), Douro Litoral and Trás-os-Montes (CORLEY *et al.*, 2009) and Beira Baixa (LAŠTŮVKA & LAŠTŮVKA, 2009). **New species for Spain** (Figs. 14-16).

*Parornix torquillella* (Zeller, 1850)

ES: León, Pardesivil, 1 ♂, 20-VI-2014.

Palaearctic species, with trophic relation to Amygdaloideae (DE PRINS & DE PRINS, 2005, 2014). In the Iberian Peninsula recorded in Portugal, Algarve (CORLEY *et al.*, 2000) and Beira Baixa (MARABUTO *et al.*, 2013). **New species for Spain** (Figs. 17-19).

*Parornix tenella* (Rebel, 1919)

PT: Trás-os-Montes, Izeda, Rio Sabor, 1 ♂, 16-VI-2014, Abreiro, 1 ♂, 17-VI-2014.

Species with insufficiently known distribution, recorded in some southern and southern central European countries (DE PRINS & DE PRINS, 2005, 2014). In the Iberian Peninsula recorded in Sierra Nevada in Andalusia (VIVES MORENO, 1994). Its larva mines on *Prunus spinosa* (unpublished own records), possibly also on other *Prunus* species. **New species for Portugal** (Figs. 20, 21).

*Phyllonorycter distentella* (Zeller, 1846)

ES: Barcelona, San Sadurn de Noya, mines on *Quercus pubescens*, 26-VI-2014, 1 ♀ ex pupa,

VI-2014, Santa María de Oló, mines on *Q. pubescens*, 25-VI-2014, 1 ♂, 2 ♀♀ ex pupa, VI-2014; Gerona, Espinelves, 2 ♀♀ and mines on *Q. pubescens*, 7-VI-2014, 1 ♀ ex pupa, VII-2014; Huesca, Espés-Alins, 1 ♀, 8-VI-2014; León, Pardesivil, 1 ♂, 1 ♀, 20-VI-2014. PT: Beira Alta, Pinzio, mines on *Quercus pyrenaica*, 17-VI-2011, 2 ♂♂ ex larva, VI-2011.

Species distributed in central and southern parts of Europe and western Asia, its larva prefers *Quercus pubescens*, but also other *Quercus* species as host plants are given (DE PRINS & DE PRINS, 2005, 2014). In the Iberian Peninsula known from some localities in Portugal (MENDES, 1905, DE PRINS & DE PRINS, 2005, 2014, M. Corley, pers. comm.). **New species for Spain** (Figs. 22, 23).

*Phyllonorycter cavella* (Zeller, 1846)

ES: Huesca, Espés-Alins, 2 ♀♀, 8-VI-2014.

Species with wide Eurosiberian distribution; larva mines on various *Betula* species, also some other hostplants are occasionally given (DE PRINS & DE PRINS, 2005, 2014). **New species for Spain and the Iberian Peninsula** (Fig. 24).

*Phyllonorycter deschkai* Triberti, 2007

ES: Huesca, Espés-Alins, 2 ♀♀, 8-VI-2014.

Species of the *Phyllonorycter blancardella* (Fabricius, 1781) species group, known from Austria, Germany, Italy, Switzerland (TRIBERTI, 2007), France and Slovakia (own unpublished records). Larva mines some species of the genera *Sorbus* (esp. *S. aria*), *Cotoneaster* and *Amelanchier ovalis* (TRIBERTI, 2007). The two collected females were beaten from bushes of *Sorbus aria*. **New species for Spain and the Iberian Peninsula** (Fig. 25).

*Phyllonorycter acerifoliella* (Zeller, 1839)

ES: Barcelona, San Sadurní de Noya, mines on *Acer campestre*, 29-VI-2011, 1 ♂, 2 ♀♀ ex larva, VI-2011; Burgos, Hoyos del Tozo, mines on *Acer campestre*, 22-VI-2014, 1 ♂ ex pupa, 28-VI-2014, Tablada del Rudrón, mines on *Acer campestre*, 22-VI-2014.

Eurosiberian species, known from nearly whole Europe, its larva mines usually *Acer campestre* (DE PRINS & DE PRINS, 2005, 2014). **New species for Spain and the Iberian Peninsula** (Fig. 26).

*Phyllonorycter ochreojunctella* (Klimesch, 1942)

PT: Trás-os-Montes, Abreiro, 2 ♂♂, 17-VI-2014.

Species known from some localities in Spain, larva mines on *Acer monspessulanum* and *A. opalus* (LAŠTŮVKA & LAŠTŮVKA, 2011, 2014). The record of *P. monspessulanella* (Fuchs, 1897) by CORLEY *et al.* (2007) from the same locality based only on mines very probably relates to this species. **New species for Portugal**.

*Phyllonorycter dubitella* (Herrich-Schäffer, 1855)

ES: Huesca, Espés-Alins, 1 ♂, 8-VI-2014.

Species known from nearly whole Europe, its larva mines preferably *Salix caprea* and related *Salix* species (DE PRINS & DE PRINS, 2005, 2014). **New species for Spain and the Iberian Peninsula** (Fig. 27).

## New province records

### NEPTICULIDAE

The complete faunistic data and remarks on the following Nepticulidae and Opostegidae are given by VAN NIEUKERKEN *et al.* (2004, 2010), partly by LAŠTŮVKA & LAŠTŮVKA (2007b, 2008, 2009, 2011, 2014).

*Stigmella alnetella* (Stainton, 1856)

ES: Orense, Sandiás 1 ♂, 13-VI-2014; León, Páramo de Sil 2 ♂♂, 1 ♀, 19-VI-2014. PT: Trás-os-Montes, Abreiro, 2 ♂♂, 17-VI-2014.

Published records based mostly only on the vacated mines (cf. VAN NIEUKERKEN *et al.*, 2004).

*Stigmella thuringiaca* (Petry, 1904)

ES: Burgos, Hoyos del Tozo, 1 ♂, 21-VI-2014.

*Stigmella salicis* (Stainton, 1854)

ES: Huesca, Espés-Alins, 1 ♂, 8-VI-2014.

*Stigmella vimineticola* (Frey, 1856)

ES: Huesca, Boltaña, 2 ♂♂, 2 ♀♀, 9-VI-2014.

Reliably documented only from the province Teruel (VAN NIEUKERKEN *et al.*, 2004).

*Stigmella trimaculella* (Haworth, 1828)

ES: Orense, Covas, mines on *Populus nigra*, 19-VI-2014; León, Páramo de Sil, 1 ♂, 19-VI-2014.

*Stigmella hemargyrella* (Kollar, 1832)

ES: Burgos, Santa Coloma del Rudrón, 1 ♂ and mines on *Fagus sylvatica*, 22-VI-2014.

All previous records from the Iberian Peninsula based only on vacated mines (VAN NIEUKERKEN *et al.*, 2004).

*Stigmella suberivora* (Stainton, 1869)

ES: León, Páramo de Sil, 1 ♀, 19-VI-2014. PT: Trás-os-Montes, Izeda, Rio Sabor, 2 ♂♂, 1 ♀, 16-VI-2014.

*Stigmella basiguttella* (Heinemann, 1862)

ES: Burgos, Hoyos del Tozo, 1 ♂, 21-VI-2014; Orense, Rabal, 1 ♂, 12-VI-2014, Sandiás, 1 ♂, 1 ♀, 13-VI-2014.

*Stigmella dorsiguttella* (Johansson, 1971)

ES: León, Páramo de Sil, 1 ♂, 19-VI-2014.

*Stigmella atricapitella* (Haworth, 1828)

ES: León, Páramo de Sil, 1 ♀, 19-VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 1 ♂, 14-VI-2014, 1 ♂, 18-VI-2014.

*Stigmella samiatella* (Zeller, 1839)

ES: León, Pardesivil, 3 ♂♂, 20-VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 3 ♂♂, 14-VI-2014.

First collected adults from Portugal, previously recorded only from mines (VAN NIEUKERKEN *et al.*, 2004).

*Stigmella roborella* (Johansson, 1971)

ES: León, Páramo de Sil, 3 ♂♂, 19-VI-2014.

*Stigmella eberhardi* (Johansson, 1971)

ES: Orense, Rabal, 1 ♀, 12-VI-2014, Sandiás, 2 ♀♀, 13-VI-2014.

*Trifurcula ortneri* (Klimesch, 1951)

ES: Burgos, Hoyos del Tozo, 1 ♂, 21-VI-2014; Huesca, Javierrelatre, 3 ♂♂, 10-VI-2014.

*Trifurcula josefklimeschi* van Nieukerken, 1990

ES: Burgos, Hoyos del Tozo, 1 ♂, 21-VI-2014; Santa Marina, 1 ♂, 2 ♀♀, 11-VI-2014; Huesca, Boltaña, 1 ♂, 9-VI-2014, Javierrelatre, 1 ♂, 10-VI-2014.

*Trifurcula squamatella* Stainton, 1849

ES: Orense, Rabal, 1 ♀, 12-VI-2014; Sandiás, 1 ♂ and mines on *Cytisus striatus*, 13-VI-2014, 3 ♂♂, 2 ♀♀ ex larva, IX-2014.

Unusually early occurrence and a new host plant.

*Parafomoria cistivora* (Peyerimhoff, 1871)

ES: Guadalajara, Aguilax de Anguita, mines on *Cistus laurifolius*, 23-VI-2014.

*Parafomoria ladaniphila* (Mendes, 1910)

ES: Guadalajara, Aguilax de Anguita, mines on *Cistus laurifolius*, 23-VI-2014.

*Ectoedemia septembrella* (Stainton, 1849)

PT: Trás-os-Montes, Serra do Gerês, Portela do Homem, 1 ♂, 14-VI-2014.

*Ectoedemia liebwerdella* (Zimmermann, 1940)

ES: León, Páramo de Sil, 1 ♂, 19-VI-2014; Pardesivil, 1 ♂, 20-VI-2014.

*Ectoedemia longicaudella* Klimesch, 1953

ES: Huesca, Javierrelatre, 1 ♂, 10-VI-2014.

*Ectoedemia liguricella* Klimesch, 1953

PT: Trás-os-Montes, Izeda, Rio Sabor, 2 ♀♀, 16-VI-2014.

*Ectoedemia caradjai* (Groschke, 1944)

PT: Trás-os-Montes, Abreiro, 1 ♂, 17-VI-2014.

*Ectoedemia phaeolepis* van Nieukerken, Laštůvka & Laštůvka, 2010

ES: León, Páramo de Sil, 1 ♂, 19-VI-2014. PT: Izeda, Rio Sabor, 1 ♂, 16-VI-2014, Trás-os-Montes, Abreiro, 1 ♂, 17-VI-2014.

*Ectoedemia quinquella* (Bedell, 1848)

PT: Minho, Serra do Gerês, Portela do Homem, 3 ♂♂, 14-VI-2014.

In the Iberian Peninsula recorded for the first time in the province Gerona in 2012 (LAŠTŮVKA & LAŠTŮVKA, 2014).

*Ectoedemia haraldi* (Soffner, 1942)

ES: León, Páramo de Sil, 2 ♀♀, 19-VI-2014.

*Ectoedemia ilicis* (Mendes, 1910)

ES: Burgos, Hoyos del Tozo, 1 ♂, 21-VI-2014; Gerona, Espinelves, 1 ♂, 25-VI-2014; León, Páramo de Sil, 4 ♂♂, 2 ♀♀, 19-VI-2014; Orense, Rabal, 1 ♀, 12-VI-2014.

*Ectoedemia albifasciella* (Heinemann, 1871)

ES: Orense, Sandiás, 1 ♂, 1 ♀, 13-VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 3 ♂♂, 2 ♀♀, 14-VI-2014, 1 ♂, 1 ♀, 18-VI-2014.

*Ectoedemia pubescivora* (Weber, 1938)

ES: Burgos, Hoyos del Tozo, 1 ♀, 21-VI-2014; Huesca, Boltaña, 1 ♀, 9-VI-2014, Javierrelatre, 1 ♂, 1 ♀, 10-VI-2014.

*Ectoedemia subbimaculella* (Haworth, 1828)

PT: Minho, Serra do Gerês, Portela do Homem, 2 ♂♂, 2 ♀♀, 14-VI-2014.

OPOSTEGIDAE

*Pseudopostega crepusculella* (Zeller, 1839)

ES: Huesca, Boltaña, 1 ♂, 9-VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 2 ♀♀, 18-VI-2014; Trás-os-Montes, PN Montesinho, Montesinho, 1 ♀, 15-VI-2014.

HELIOZELIDAE

*Heliozela resplendella* (Stainton, 1851)

PT: Trás-os-Montes, Izeda, Rio Sabor, empty mines on *Alnus glutinosa*, 16-VI-2014.

Known from the province of Orense in Spain (LAŠTŮVKA & LAŠTŮVKA, 2014) and from Beira Alta in Portugal (CORLEY *et al.*, 2006).

GRACILLARIIDAE

*Caloptilia stigmatella* (Fabricius, 1781)

ES: Gerona, Espinelves, 1 ♀, 27-VI-2012; Orense, Rabal, mines on *Salix aurita*, 17-VI-2013, 2 ♂♂, 12-VI-2014; Cádiz, Algodonales, Juncas, 4 ♂ ♀, 5 ♀♀, 22-VI-2011; León, Páramo de Sil, 1 ♂, 1 ♀, 19-VI-2014; Zaragoza, Aguarón, mines, 11-VI-2012, 1 ♀ ex larva, VI-2012. PT: Trás-os-Montes, Izeda, Rio Sabor, 1 ♂, 16-VI-2014.

Species widespread especially in the northern and western parts of the Iberian Peninsula.

*Caloptilia falconipennella* (Hübner, [1813])

ES: Orense, Penelas, mines on *Alnus glutinosa*, 14-VI-2014; Sandiás, 1 ♂, 13-VI-2014. PT: Trás-os-Montes, Izeda, Rio Sabor, 1 ♂, 16-VI-2014.

Species known from more provinces both in Portugal and Spain (e.g. MARABUTO *et al.*, 2013, LAŠTŮVKA & LAŠTŮVKA, 2014).

*Caloptilia cuculipennella* (Hübner, 1796)

ES: Orense, Rabal, 1 ♀, 12-VI-2014.

Known from three Spanish provinces (LAŠTŮVKA & LAŠTŮVKA, 2014); the Portuguese record is uncertain (CORLEY *et al.*, 2013).

*Caloptilia robustella* Jäckh, 1972

ES: Gerona, Espinelves, 1 ♂, 27-VI-2012; León, Páramo de Sil, 1 ♂, 19-VI-2014, Villarmeriel, 1 ♂, 1 ♀, 13-VI-2012.

Given from Spain by DE PRINS & DE PRINS (2005) and from more localities in Portugal (CORLEY *et al.*, 2006, PIRES & CORLEY, 2007).

*Caloptilia hemidactylella* ([Denis & Schiffermüller], 1775)

ES: Burgos, San Andrés de Montearados, mines with larvae on *Acer campestre*, 21-VI-2014, 2 ♀♀ ex larva, VII-2014.

In Spain known from the provinces Barcelona and Gerona (LAŠTŮVKA & LAŠTŮVKA, 2011, 2014).



*Caloptilia fribergensis* (Fritzsche, 1871)

PT: Minho, Peneda do Gerês, Portela do Homem, mines with larvae on *Acer pseudoplatanus*, 14-VI-2014, 12 ♂♂, 6 ♀♀ ex larva, VII-2014; Trás-os-Montes, Izeda, Rio Sabor, 2 ♂♂, 1 ♀, 16-VI-2014, Abreiro, 1 ♂, 17-VI-2014.

Spanish records are summarized by LAŠTŮVKA & LAŠTŮVKA (2011 and 2014), in Portugal known from Estremadura and Minho (CORLEY *et al.*, 2006).

*Povolnya leucapennella* (Stephens, 1835)

ES: Gerona, Espinelves, 1 ♀, 27-VI-2012.

*Parectopa ononidis* (Zeller, 1839)

ES: Burgos, Santa Marina, 1 ♂, 13-VI-2012; Granada, Puebla de Don Fadrique, La Sagra, 1 ♂, 24-VI-2011; Huesca, Boltaña, 2 ♂♂, 9-VI-2014. PT: Trás-os-Montes, Abreiro, 3 ♂♂, 17-VI-2014.

Probably widespread, but overlooked species.

*Parornix betulae* (Stainton, 1854)

ES: Orense, Taboadella, mines on *Betula pubescens*, 14-VI-2014, Rabal, 3 ♀♀, 12-VI-2014; Lugo, Ferreira de Pantón, mines on *Betula pubescens*, 19-VI-2014. PT: Trás-os-Montes, PN Montesinho, Montesinho, 16-VI-2014, Tourém, 18-VI-2014, São Julião de Montenegro, 18-VI-2014, always mines on *Betula pubescens*.

Known from the province of Zamora in Spain (LAŠTŮVKA & LAŠTŮVKA, 2014) and from Minho in Portugal (CORLEY *et al.*, 2006).

*Phyllonorycter endryella* (Mann, 1855)

ES: Cáceres, Guadalupe, 1 ♂, 1 ♀, 11-VI-2009; Guadalajara, Aguilax de Anguita, mines on *Quercus ilex*, 23-VI-2014; León, Páramo de Sil, 2 ♂♂, 19-VI-2014. PT: Trás-os-Montes, Izeda, Rio Sabor, 1 ♀, 16-VI-2014.

Known from Algarve in Portugal (PASSOS & CORLEY, 1995) and from more provinces in Spain (OLIVELLA, 2000, LAŠTŮVKA & LAŠTŮVKA, 2007, 2014).

*Phyllonorycter belotella* (Staudinger, 1859)

ES: Guadalajara, Aguilax de Anguita, mines on *Quercus ilex*, 23-VI-2014; León, Páramo de Sil, 2 ♂♂, 1 ♀, 19-VI-2014.

Widespread and known from many other localities in Spain (OLIVELLA, 2000, LAŠTŮVKA & LAŠTŮVKA, 2007a).

*Phyllonorycter barbarella* (Rebel, 1901)

PT: Minho, Serra do Gerês, Portela do Homem, 2 ♂♂, 3 ♀♀, 14-VI-2014.

In Portugal recorded by VIVES MORENO (1994) from Beira Alta.

*Phyllonorycter messaniella* (Zeller, 1846)

ES: Gerona, Espinelves, 1 ♂, 2 ♀♀, 7-VI-2014; León, Páramo de Sil, 2 ♂♂, 19-VI-2014; Málaga, Jubrique, 1 ♂, 16-VI-2008. PT: Beira Alta, Pinzio, 1 ♂, 17-VI-2011; Beira Baixa, Penhas da Saúde, 1 ♂, 23-VI-2007; Minho, Serra do Gerês, Portela do Homem, 2 ♀♀ and mines on *Quercus robur*, 14-VI-2014, 1 ♀ ex pupa, VI-2014.

Widespread in the Iberian Peninsula and known from many localities (e.g. CORLEY *et al.*, 2000, CORLEY, 2005, PIRES & CORLEY, 2007, LAŠTŮVKA & LAŠTŮVKA, 2007a).

*Phyllonorycter harrisella* (Linnaeus, 1761)

ES: Orense, Sandiás, 2 ♀♀, 13-VI-2014; León, Páramo de Sil, 1 ♂, 19-VI-2014.

*Phyllonorycter delitella* (Duponchel, 1843)

ES: Barcelona, Santa María de Oló, mines with pupae on *Quercus pubescens*, 25-VI-2014, 1 ♂ ex pupa, 29-VI-2014.

*Phyllonorycter kuhlweiniella* (Zeller, 1839)

ES: Gerona, Espinelves, 1 ♀, 27-VI-2012, 1 ♀, 7-VI-2014; León, Páramo de Sil, 1 ♂, 19-VI-2014, Pardesivil, 2 ♀♀, 20-VI-2014.

*Phyllonorycter coryli* (Nicelli, 1851)

ES: Gerona, Espinelves, 1 ♂, 27-VI-2012.

In Spain recorded from the provinces of Barcelona (OLIVELLA, 2000) and Lérida (DANTART *et al.*, 2010).

*Phyllonorycter maestingella* (Müller, 1764)

ES: Burgos, Santa Coloma del Rudrón, 1 ♂ and mines on *Fagus sylvatica*, 21-VI-2014, Sargentos de la Lora, mines with pupae on *Fagus sylvatica*, 22-VI-2014, 2 ♀♀ ex larva, VII-2014; Huesca, Boltaña, 1 ♂, 9-VI-2014.

Distributed in northern Spanish provinces probably together with its host plant, recorded from the province of Barcelona (OLIVELLA, 2000).

*Phyllonorycter nicellii* (Stainton, 1851)

ES: Gerona, Espinelves, 1 ♀, 27-VI-2012, 1 ♂, 25-VI-2014.

In Spain recorded from the provinces of Barcelona (OLIVELLA, 2000) and Lérida (DANTART *et al.*, 2010).

*Phyllonorycter froelichiella* (Zeller, 1839)

ES: Gerona, La Junquera, mines on *Alnus glutinosa*, 28-VI-2012, 1 ♀ ex pupa, 30-VI-2012; León, Páramo de Sil, 1 ♀, 19-VI-2014.

In Spain recorded from the province Barcelona (OLIVELLA, 2000), probably widespread in northern and western parts of the Iberian Peninsula.

*Phyllonorycter klemannella* (Fabricius, 1781)

ES: Gerona, La Junquera, mines on *Alnus glutinosa*, 28-VI-2012, 2 ♂♂, 1 ♀ ex pupa, 30-VI-2012.

*Phyllonorycter rajella* (Linnaeus, 1758)

ES: Gerona, La Junquera, mines on *Alnus glutinosa*, 26-VI-2014, 1 ♂ ex pupa, 30-VI-2014.

In Spain recorded in provinces of Barcelona (LAŠTŮVKA & LAŠTŮVKA, 2011) and Lérida (DANTART *et al.*, 2010).

*Phyllonorycter alnivorella* (Ragonot, 1875)

ES: Barcelona, San Sadurn de Noya, mines on *Alnus glutinosa*, 8-VI-2014; Córdoba, Obejo-La Canaleja, mines on *Alnus glutinosa*, 21-VI-2012, 1 ♂ ex pupa, VI-2012; Gerona, Espinelves, 8-VI-2014, mines on *Alnus glutinosa*; León, Páramo de Sil, 1 ♂, 19-VI-2014, Pinilla de la Valdería, mines on *Alnus glutinosa*, 16-VI-2012.

Probably widespread with its host plant especially in northern and western parts of the Iberian Peninsula (MENDES, 1905, CORLEY *et al.*, 2000, LAŠTŮVKA & LAŠTŮVKA, 2014).

*Phyllonorycter ulmifoliella* (Hübner, [1817])

ES: Orense, Rabal, mines on *Betula pubescens*, 13-VI-2014; Zamora, Puebla Sanabria, mines on *Betula pubescens*, 12-VI-2014; PT: Minho, Serra do Gerês, Portela do Homem, mines on *Betula pubescens*, 18-VI-2014, 2 ♀♀ ex pupa, VI-2014; Trás-os-Montes, Quintela, mines on *Betula pubescens*,

18-VI-2014, 1 ♀ ex pupa, VI-2014, São Julião de Montenegro, mines on *Betula pubescens*, 18-VI-2014, Tourém, mines on *Betula pubescens*, 18-VI-2014. Recorded in Portugal (Trás-os-Montes) by CORLEY *et al.* (2006) and in Spain (Lérida) by DANTART *et al.* (2010).

*Phyllonorycter salictella* (Zeller, 1846)

ES: Huesca, Boltaña, 2 ♂♂, 9-VI-2014; León, Páramo de Sil, 3 ♂♂, 1 ♀, 19-VI-2014; Orense, Rabal, 1 ♂, 12-VI-2014.

*Phyllonorycter haasi* (Rebel, 1901)

ES: León, Páramo de Sil, 1 ♂, 19-VI-2014.

Known in the provinces Ávila, Lérida and Segovia (LAŠTŮVKA & LAŠTŮVKA, 2006, 2011). The westernmost Iberian Peninsula record.

*Phyllonorycter floridae* Laštůvka & Laštůvka, 2012

ES: León, Páramo de Sil, 1 ♂, 19-VI-2014.

Third Spanish record (LAŠTŮVKA & LAŠTŮVKA, 2012, 2014).

*Phyllonorycter cerasinella* (Reutti, 1853)

ES: Huesca, Espés-Alins, 1 ♂, 8-VI-2014.

In Spain recorded in the province Lerida by LAŠTŮVKA & LAŠTŮVKA (2006).

*Phyllonorycter tridentatae* Laštůvka & Laštůvka, 2006

ES: León, Páramo de Sil, 5 ♂♂, 19-VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 3 ♂♂, 14-VI-2014, 1 ♂, 18-VI-2014; Trás-os-Montes, Abreiro, 2 ♂♂, 1 ♀, 17-VI-2014, PN Montesinho, Montesinho, 1 ♂, 1 ♀, 15-VI-2014.

Recorded from 5 Spanish and 2 Portuguese provinces by LAŠTŮVKA & LAŠTŮVKA (2006, 2014).

*Phyllonorycter parvifoliella* (Ragonot, 1875)

ES: Cáceres, Guadalupe, 1 ♀, 11-VI-2009; Málaga, La Majada Higuera, 1 ♂, 18-VI-2009; Orense, Rabal, 1 ♂, 12-VI-2014. PT: Minho, Serra do Gerês, Portela do Homem, 1 ♀, 18-VI-2014; Trás-os-Montes, Abreiro, 2 ♂♂, 17-VI-2014.

Previous records from Spain and Portugal given by CORLEY *et al.* (2000) and LAŠTŮVKA & LAŠTŮVKA (2006).

*Phyllonorycter insignitella* (Zeller, 1846)

ES: Albacete, Riopar, mines on *Medicago*, 23-VI-2012, 1 ♂, 1 ♀ ex larva, VI-2012; Gerona, Espinelves, mines on *Medicago* sp., 8-VI-2014; Huesca, Bisauri, 3 ♂♂, 2 ♀♀, 8-VI-2014, Boltaña, 1 ♀, 9-VI-2014, Castillo del Pla, mines, 8-VI-2014, 2 ♀♀ ex pupae, 16-VI-2014; León, Pardesivil, 1 ♂, 20-VI-2014.

Known from the Spanish provinces Teruel and Zaragoza (KING & MURRIA, 2002, LAŠTŮVKA & LAŠTŮVKA, 2009).

*Phyllocnistis extrematrix* Martynova, 1955

ES: Huesca, Javierrelatre, mines on *Populus x canadensis*, 10-VI-2014; León, Páramo de Sil, 1 ♂, 19-VI-2014; Orense, Covas, mines on *Populus x canadensis*, 19-VI-2014.

First localities for the Iberian Peninsula with remarks on its bionomics are given by LAŠTŮVKA & LAŠTŮVKA (2014).

*Phyllocnistis unipunctella* (Stephens, 1834)

ES: Burgos, Tablada del Rudrón, mines on *Populus x canadensis*, 22-VI-2014; León, Páramo

de Sil, 1 ♂, 19-VI-2014; Orense, Covas, mines on *Populus x canadensis*, 19-VI-2014, 1 ♂, 1 ♀ ex pupae, 22-VI-2014, Rabal, 1 ♂ and mines with pupae, 12-VI-2014, 1 ♂ ex pupa, 15-VI-2014.

Known in Spain from the provinces Barcelona and Teruel (LAŠTŮVKA & LAŠTŮVKA, 2011).

*Phyllocnistis saligna* (Zeller, 1839)

ES: León, Pardesivil, 2 ♂♂, 20-VI-2014.

Third Spanish record (LAŠTŮVKA & LAŠTŮVKA, 2014).

## Acknowledgements

We are grateful to M. Corley (Faringdon) for important comments and linguistic revision of the manuscript, to Dr. A. Vives (Madrid) for support in obtaining collecting permits for Spain into the Scientific Project of SHILAP, for comments on the manuscript and for the linguistic revision of the Spanish abstract, to M. Segueira (ICN, Lisboa) and H. Carvalho (Parque Nacional da Peneda Gerês) for the permit to collect Lepidoptera in protected areas of Portugal.

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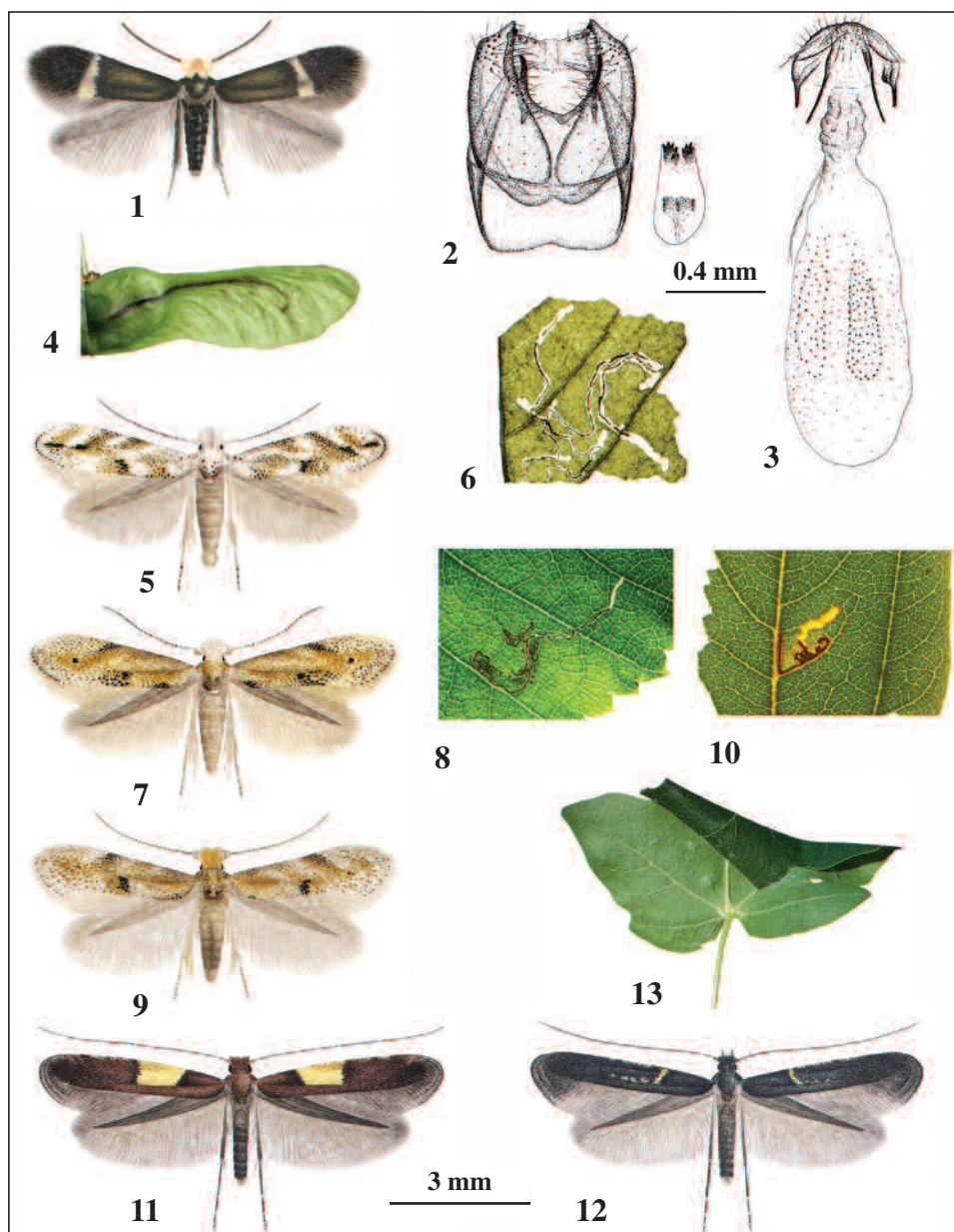
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(Recibido para publicación / *Received for publication* 23-X-2014)

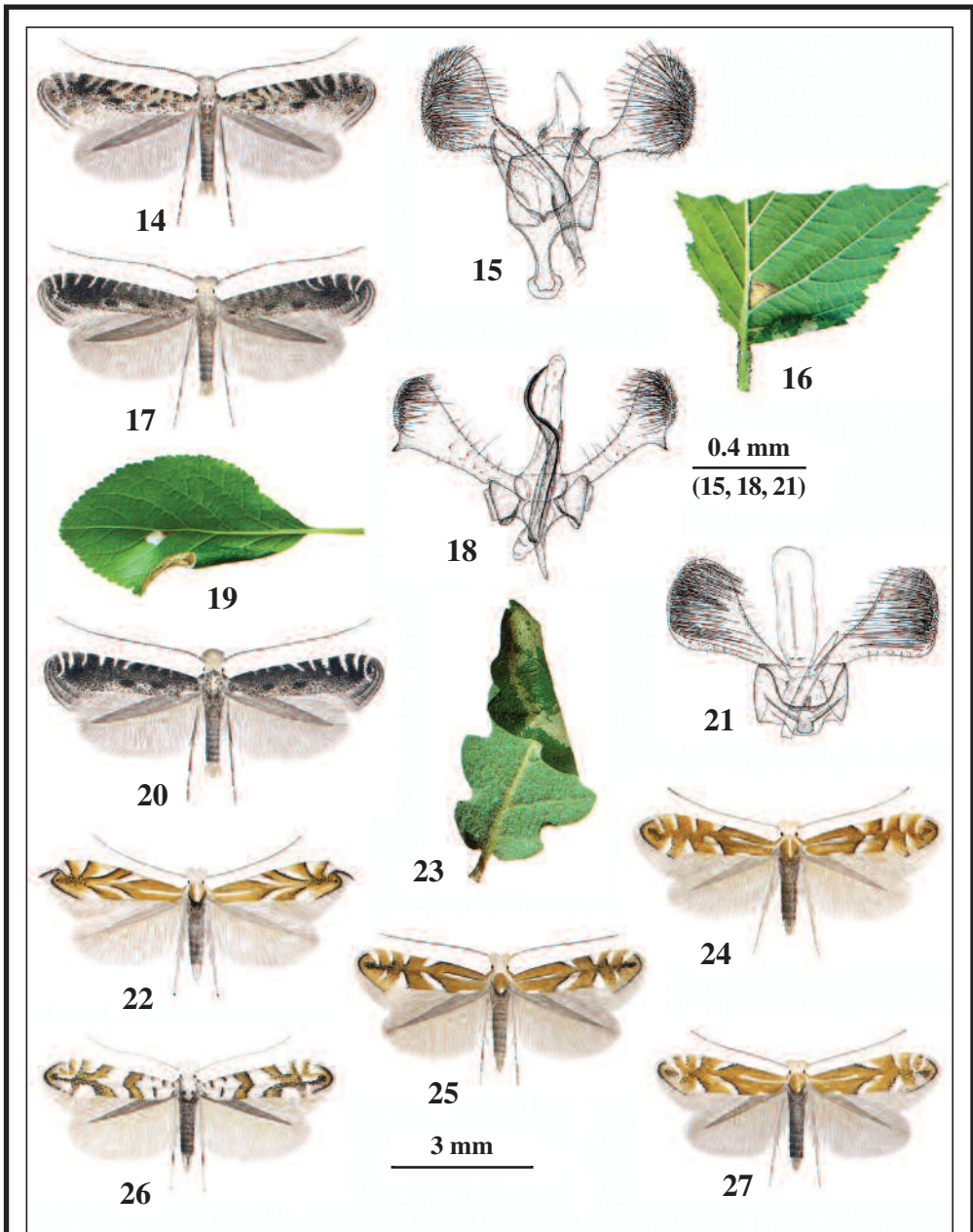
(Revisado y aceptado / *Revised and accepted* 16-XI-2014)

(Publicado / *Published* 30-XII-2014)





**Figs. 1-13.**– 1-3. *Stigmella sakhalinella* Puplesis, adult, male and female genitalia. 4. *Ectoedemia lousella* (Sircom), mine in fruit of *Acer campestre*. 5-6. *Bucculatrix albedinella* (Zeller), adult and mine in *Ulmus* sp. 7-8. *Bucculatrix demaryella* (Duponchel), adult and mine in *Betula pubescens*. 9. *B. ulmella* Zeller. 10. *B. albella* Stainton, mine in *Paliurus spina-christi*. 11-13. *Caloptilia semifascia* (Haworth), summer and winter form of adult, roll on *Acer campestre*.



**Figs. 14-27.**– 14-16. *Parornix devoniella* (Stainton), adult, male genitalia and mine in *Corylus avellana*. 17-19. *P. torquillella* (Zeller), adult, male genitalia and mine in *Prunus spinosa*. 20. 21. *P. tenella* (Rebel), adult and male genitalia. 22-23. *Phyllonorycter distentella* (Zeller), adult and mine in *Quercus pubescens*. 24. *P. cavella* (Zeller). 25. *P. deschkai* Triberti. 26. *P. acerifoliella* (Zeller). 27. *P. dubitella* (Herrich-Schäffer).